aLOINC Order Code Initiative Update

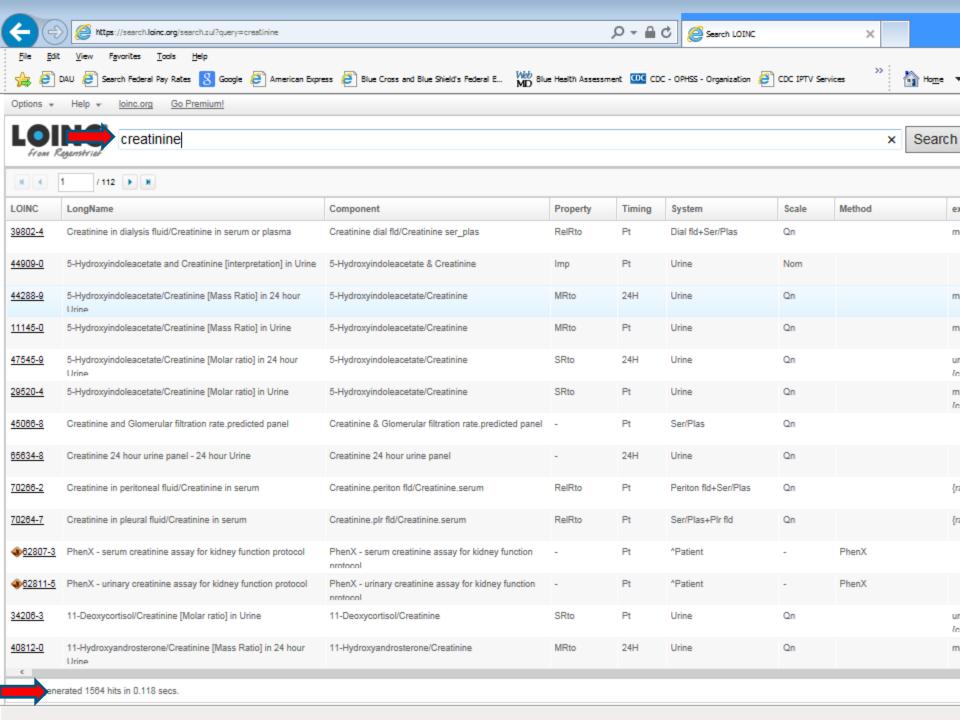
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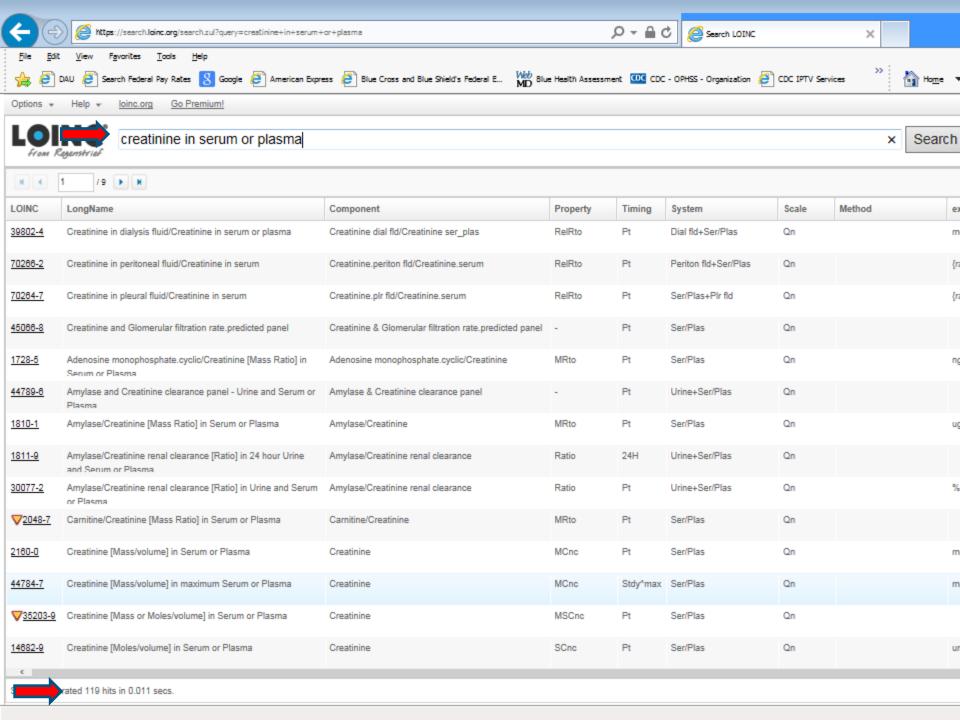
CLIAC Meeting April 15, 2015 Atlanta, Georgia

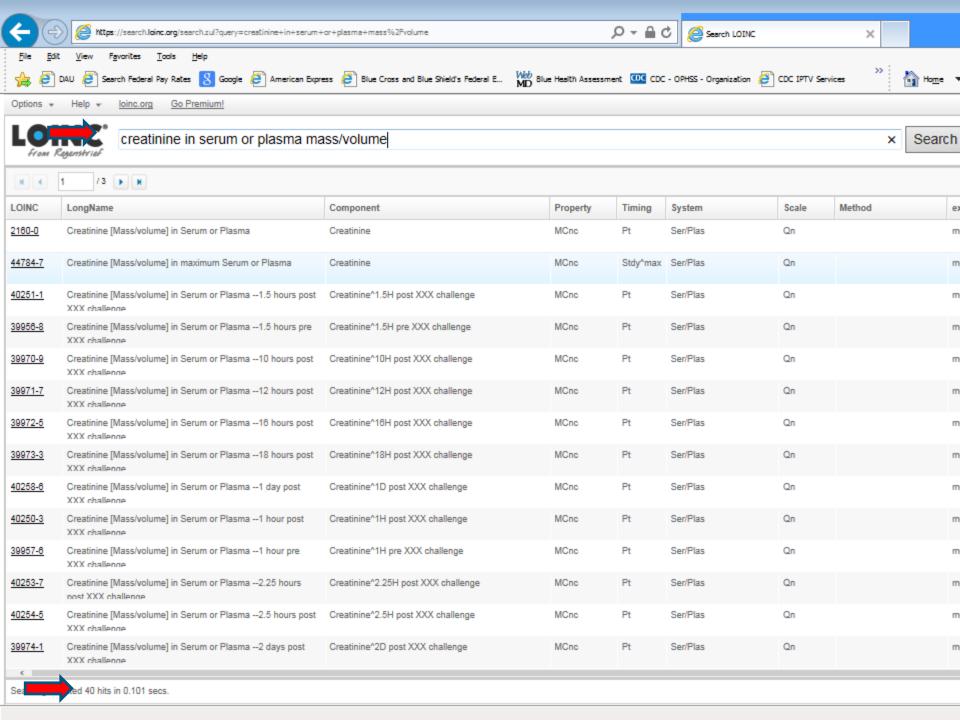


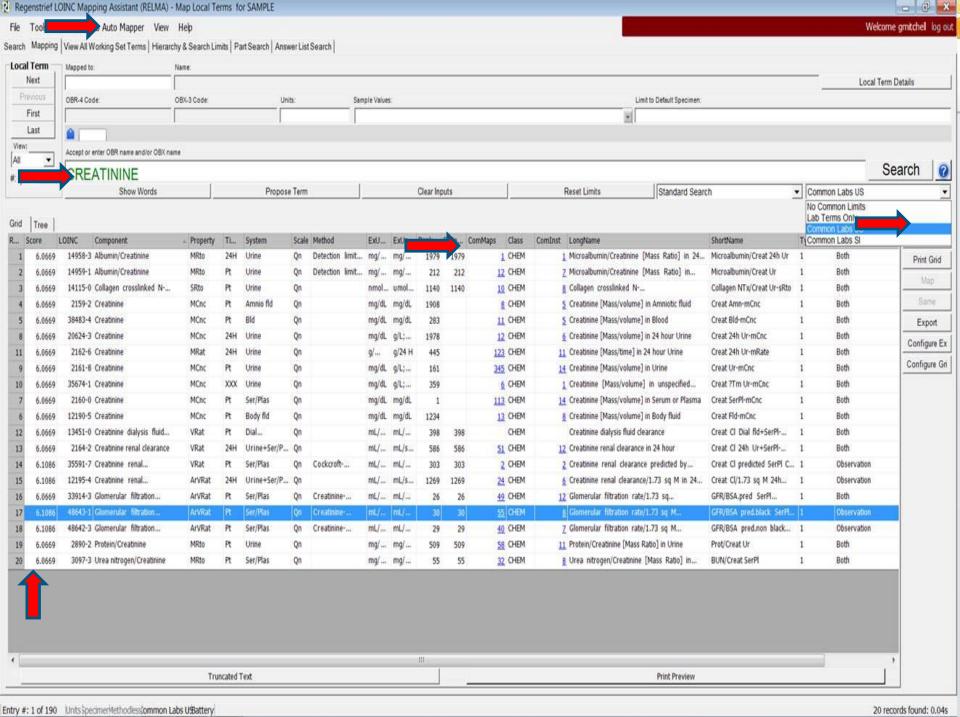
Topics

- Using LOINC Demonstration
- Standards &Interoprability Framework
 Initiative aLOINC Order Code
- Key Deliverables
- Data Reviewed
- Data Analysis
- Lessons Learned
- Summary of Preliminary Recommendations
- Next Steps









S&I Framework Initiative

- December 10, 2013 Meeting announcement
- Launch January 8, 2014
- Charge
 - To provide a common order code value set* for the Laboratory Orders Interface and Electronic Directory of Services Implementation Guides.
- Webinars held weekly from January 8, 2014 until March 4, 2015

^{*}A value set is a collection of enumerated codes.

Key Deliverables

- aLOINC Common Orders Value Set
 - Contains 1377 codes for single analytes
 - Contains 157 codes for panels
- Input to Regenstrief on guidance for comparing user panels to LOINC® panels
 - Provides some flexibility to laboratories that change tests ordered in a panel
 - Decreases the number of new tests codes requested
- Recommendations to ONC for using LOINC for laboratory orders
- Recommended content updates for Regenstrief based on review of laboratory order LOINC codes

Data Reviewed

- aLOINC Common Order Code Value Set was developed by wiki members based on a comparison to LOINC's Top 2000 Result Codes and Top 300 Order Codes
- Indiana Network for Patient Care (INPC)
 laboratory order data analyzed by
 Regenstrief
- MarketScan commercial carrier and Medicare data base of LOINC result codes analysis
- Review of tests listed in the directory of services for four reference laboratories

Data Analysis

- Volume data for a national sample was not obtainable
- In the 2 datasets with volume we reviewed, fewer than 200 different tests made up 95% of the total volume
- If a national sample of volume data were obtained, it would likely reflect significantly more test codes than the number of analytes.

Data Analysis

- A comparison of the two data sets demonstrated that the codes did not match
 - Different methods
 - Different measurements
 - Selection varies among coders

Lessons Learned

- Laboratories often customize panels for their clientele, LOINC is not flexible enough to account for additions or deletions from a panel, resulting in requests for new codes
- For a single analyte test, the same code is used for test ordering and resulting
- The LOINC code does not uniquely identify panels from single analytes

Lessons Learned (continued)

- Providers order by test name or analyte, which has to be mapped to many codes
- Anatomic pathology reporting model needed
 - Current model has several codes referring to one test (specimen collection, gross observation, interpretation, etc.)
 - Does not meet the definition of a panel if only one analyte is involved

Summary of Preliminary Recommendations

- Follow best practices when comparing laboratory data to the aLOINC Common Order Value Set
- A major barrier to developing an empirical laboratory order value set is lack of national data
- Manufacturers could provide the order and result reporting codes in the package insert

Summary of Preliminary Recommendations

- Laboratories need help selecting the appropriate test code from the 46,000+ tests in LOINC
 - Most laboratories lack coding expertise
 - Expertise in BOTH coding and laboratory practices
- Standardization efforts should include clinical and public health laboratory tests
- A new format is needed to address multiple tests ordered on one analyte (anatomic pathology and molecular testing)

Next Steps

- Draft of the final report and recommendations <u>http://wiki.siframework.org/a+LOINC+Order+Code+Homepage</u>
- Accepting comments until noon April 22, 2015
- Final draft will be posted April 27, 2015
- Last wiki call to discuss and finalize the report April 29, 2015 at 3:00pm

https://siframework1.webex.com/siframework1/onstage/g.php?t=a&d=665254609

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The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

